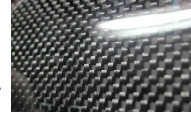


CA CARBON FIBRE INFORMATION SHEET



GENERAL

Carbon Fibre is one of the great advances in composite material technology in recent years, providing both amazing strength and incredible weight savings over original parts. This makes a perfect solution for race and fast road vehicles as well as providing a striking visual appearance when incorporated into a show vehicle.

On our website you will find Europe's largest selection of quality Carbon fibre and Kevlar fibre products including flat panel sections, 100% pre preg moulded carbon fibre parts and carbon laminated (overlay) parts, all made to a very high standard.

We can therefore mold and construct pretty much anything you want in 100% carbon or real carbon laminate almost any solid interior or exterior part of your vehicle (eg interior trim parts, body panels, custom shaped bonnets & side mouldings, the list goes on...).

TYPES OF CARBON FIBRE PRODUCT

Many people do not realise that most carbon fibre products on the market are not made from 100% carbon fibre; this is not necessarily a bad thing, but please take time to read our descriptions below of the differing forms of carbon fibre manufacture we offer so you are fully informed should you wish to order such a part .

All of our carbon products are available in one of the following manufacturing specifications / formats to your choice:

1. Carbon Fibre Overlay (also known as Laminated) :

This method involves laminating over the original part(or a composite moulded part) with a veneer of real carbon fibre. As this does not actually save any weight this method is intended mainly for aesthetic and show use on parts such as interior panels, body mouldings, engine covers etc.

Once the carbon matting has been hand laid over the core part, resin is then applied into the matting, the part is vacuum bagged to prevent air bubbles (which not only look bad but also can cause the carbon veneer to delaminate) and then cured in an oven.

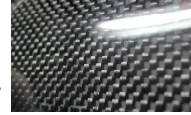
This method has sometimes been unfairly associated with poor quality but in reality the quality of the finished product is entirely a result of the quality of labour and components that are employed. It is essential that parts are vacuum bagged to assure the best quality, it is mainly parts made without vacuum bagging that have attracted any reputation of poor quality to the wet lay/overlay process. This method sometimes also gets a poor reputation due to many parts being manufactured in the Far East; again the end product quality is a direct result of the quality of the labour and materials used and not the country of manufacture; there are two very good reasons for manufacturing such parts in the Far East...firstly the cheaper labour costs help keep prices down, secondly there are certain resins and clear- coats used in the Far East that cannot legally be used in Europe / USA etc (due to their toxicity content)yet these materials give a superior shine finish and lifetime to the end product, including more of a "3D" effect for example.

NOTE: If you are buying an overlaid carbon part then it is by definition "Wet Lay", whatever the manufacturer tells you.

2. "Wet Lay" 100% Carbon Fibre

This type of wet carbon is formed by using hand laid carbon fibre sheets placed into a mould and then coated with a resin mixture. Again it is essential that the item is vacuum bagged before curing in an oven to obtain the greatest structural strength and best visual appearance. Again this kind of wet lay product is sometimes mistakenly perceived as low quality but again this is not true, as long as the parts, processes and labour are of good quality . Many a good race car chassis has been made using this method!

CA CARBON FIBRE INFORMATION SHEET



3. Pre Preg Autoclaved Carbon Fibre (Dry carbon fibre) :

The ultimate form of carbon fibre. This method is also known as vacuum formed dry carbon fibre and is usually the most expensive due to the lengthy moulding and curing procedures and actual material costs . This method is more suited to the hardcore race and track cars where maximum strength and minimum weight are paramount and is mostly applied to main structural components such as seats, body panels, blanking plates, chassis members etc. A 100% pre preg carbon fibre roof panel for example can weigh over 20kilo's LESS than a factory component.

"Pre preg" refers to the pre impregnated carbon sheeting employed, where the carbon fibre material has been pre impregnated throughout with the resin mixture.

The manufacturing process consists of vacuum- forming sheets of pre-resin impregnated carbon fibre into a mould, under great atmospheric pressure and at temperatures between 150 and 500 C in a chamber known as an Autoclave. This allows the fibres to form into an incredibly strong yet exceptionally lightweight composite material completely free of weakening air bubbles. Carbon products made this way display the most strength and durability of any process.

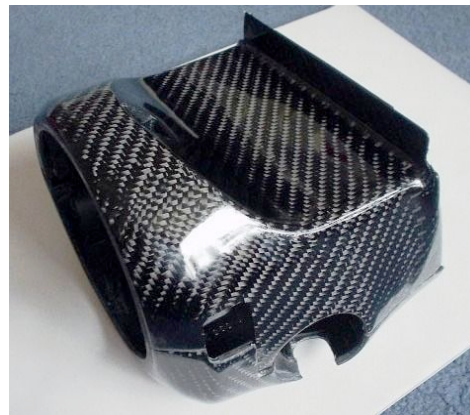
WEAVE PATTERNS & COLOURS

We offer a variety of weave patterns / textures/colours meaning we can match any existing items on your vehicle including OEM carbon fibre an option which is greatly appreciated by many E46 CSL owners for example. Please note that REAL carbon fibre is only ever **black, and only black**, "carbon" products in any other colour are actually made of coloured Kevlar or other composite strands woven together and resin impregnated to resemble carbon fibre weave.

Below are the types of weave and colours we offer, please note that colours other than black are only available as overlay products :



Diagonal Narrow Weave



Diagonal Wide Weave

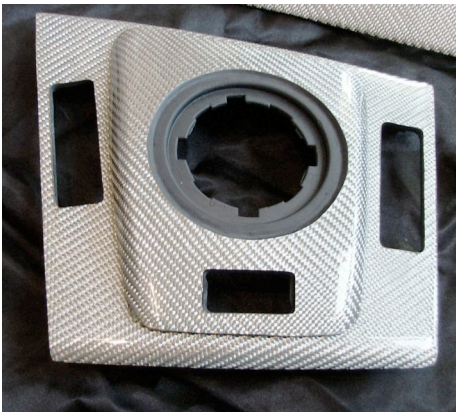
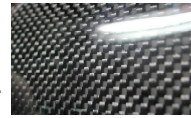


Straight Narrow Weave



Straight Wide Weave

CA CARBON FIBRE INFORMATION SHEET



Silver Carbon



Kevlar



Red Carbon